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Abstract

The smoke detector contains an optical measuring chamber, having a sensor arrangement (2) with at least one light source (12, 12') and one light receiver (11), and a labyrinth system (7) with screens (16) arranged on the periphery of the measuring chamber. The light source (12, 12') and the light receiver (11) are each arranged in a housing (14, 15; 13). The above-mentioned housings (14, 15; 13) have an elongated shape and a small window opening. The at least one light source (12, 12') and light receiver (12, 12') are arranged in the rear part of their housings (14, 15; 13), so that between the window openings of the housings (14, 15; 13) and the light-penetrated optical surfaces of the at least one light source (12, 12') and/or the lens of the light receiver (11) a relatively large gap is formed. This gap is preferably greater than the diameter of the above-mentioned optical surfaces, or of the above-mentioned lens.

In the measuring chamber between the light exit and entry side of the housings (14, 15; 13) and the screens (16) opposite them, a compact, open scattering space is formed.

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